Reviewer's report

Title: Post-operative left atrial volume index is a predictor of the occurrence of permanent atrial fibrillation after mitral valve surgery in patients who undergo mitral valve surgery

Version: 0 Date: 12 Jan 2018

Reviewer: Rodolfo Citro

Reviewer's report:

The article "Post-operative left atrial volume index is a predictor of the occurrence of permanent atrial fibrillation after mitral valve surgery in patients who undergo mitral valve surgery" written by Kang et al is well written and adds novelties to the scientific scenery of the subtype of patients which analyzes.

However some corrections and minor revisions have to be done.

1. In the "Study design and partecipants" paragraph, page 6, 9th line, permanent AF should be better defined.

2. In the "Results" paragraph, page 8, 6th line, are described percentages of only pre-operative LVEF. Percentages of post-operative LVEF have to be added.

3. In the "Results" paragraph, page 8, 18th line, is not specified to which valve is referred the mean diastolic pressure gradient. Clarify this point.

4. In the "Discussion" paragraph, page 11, 15th line, is written "diastolic function" but I think there is a mistake. You should write "diastolic dysfunction".

5. References 27, 28, 29 are not mentioned in the "References" paragraph.

6. All references mentioned in the "References" paragraph have to be cited in the text. Cite all references in the text.

7. References cited in the "Background" paragraph must be written at the apex.
8. Table 1 presents some mistakes: 1) on 4th and on 5th line Variables are not adequately described, 2) Mitral Valve replacement subgroups are not appropriately described in the NSR and in the AF subgroup

9. In Figure 1, in the 2 last boxes of the diagram, should be specified that "New onset permanent AF" subgroup and the "Maintenance of sinys rhythm" subgroup are referent to patients underwent surgery.

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